What is claimed is:

1. An interferometric system, comprising:

a source module configured to generate mutually orthogonally polarized beams of light from spatially separated sources;

an interferometry module receiving said mutually orthogonally polarized beams from said source module, and having at least a reference object and a test object for interaction with said beams; and

a simultaneous phase shifting module receiving a portion of said beams from said interferometry module for generating at least two phase-shifted interferograms substantially simultaneously from said beams.

2. An interferometric system of claim 1, wherein said interferometric module is configured to define a substantially common path for said beams between said source module and a reflective surface of said reference object.

3. An interferometric system of claim 1, wherein said portion of said beams comprises mutually orthogonally polarized reference and test beams

4. An interferometric system of claim 3, wherein said reference beam emanated from one of said spatially separated sources and said test beam emanated from another of said spatially separated sources.

5. An interferometric system of claim 3, wherein said reference and test beams received by said simultaneous phase shifting module substantially overlap each other.

6. An interferometric system of claim 1, wherein the mutually orthogonally polarized beams are coherent.

7. An interferometric system of claim 1, wherein there are two of said spatially separated sources

8. An interferometric system of claim 1, further comprising an alignment module.

9. An interferometric system of claim 1, further comprising an imaging module.

10. An interferometric system of claim 1, wherein the source module includes a linearly polarized light source and a polarization beamsplitter configured to split linearly polarized light into said two mutually orthogonally polarized beams.

11. An interferometric system of claim 1, wherein said sources are virtual.

12. An interferometric system of claim 1, wherein said sources are real.

13. An interferometric system of claim 1, wherein the interferometry module further includes a nonpolarizing beamsplitter.

14. An interferometric system of claim 13, wherein the nonpolarizing beamsplitter is positioned substantially between the source module and the reference object.

15. An interferometric system of claim 1, wherein the interferometry module further includes a quarter waveplate positioned between the source module and the reference object.

16. An interferometric system of claim 15, wherein the quarter waveplate is positioned substantially between the nonpolarizing beamsplitter and a collimator.

17. An interferometric system of claim 1, wherein the interferometry module is of a Fizeau configuration.

18. An interferometric system of claim 8, wherein the alignment module is positioned to intercept the beams between the interferometry module and the simultaneous phase-shifting module.

19. An interferometric system of claim 9, wherein the imaging module is positioned to intercept the beams between the interferometry module and the simultaneous phase shifting module.

20. An interferometric system of claim 1, wherein the source module includes a polarization beamsplitter configured to interact with a beam from a source to provide said mutually orthogonally polarized beams.

21. An interferometric system of claim 20, wherein said polarization beamsplitter comprises a prism.

22. An interferometric system of claim 20, wherein said polarization beamsplitter comprises a calcite beam displacer

23. An interferometric system of claim 20, wherein said polarization beamsplitter comprises two calcite beam displacers and a half waveplate.

24. An interferometric system of claim 20, wherein the polarization beamsplitter comprises two fiber optics and cube polarizing beamsplitter.

25. An interferometric system of claim 20, wherein the polarization beamsplitter comprises a polarizing lateral displacement beamsplitter

26. An interferometric system of claim 20, wherein the polarization beamsplitter comprises a cube polarizing beamsplitter and mirror.

27. An interferometric system of claim 1, further comprising a filter to block said other portion of the beams from entering the simultaneous phase shifting module.

28. An interferometric system of claim 27, wherein said filter is configured with an aperture to permit passage of said portion of the beams received by the simultaneous phase shifting module.

29. An interferometric system, comprising:

a source module having a source of polarized light and a polarization beamsplitter configured to act on said polarized light to generate mutually orthogonally polarized beams of light;

an interferometry module receiving said orthogonally polarized beams from said source, having optical elements, a reference object and a test object , where said optical elements are configured to define a substantially common pathway for said beams, said interferometry module further comprising means for overlapping a test beam and a reference beam ;

a phase shifting module receiving a portion of said beams from said interferometry module to generate at least two phase-shifted interferograms substantially simultaneously from said test and reference beams.

30. An interferometric system of claim 29, wherein said polarized light from said source module is linearly polarized.

31. An interferometric system of claim 29, further comprising means for viewing said test and reference beams.

32. An interferometric system of claim 29, further comprising means for selecting said test and reference beams.

33. An interferometric system, comprising:

a source module having a source of linearly polarized light, and a polarization beamsplitter configured to generate mutually orthogonally polarized wavefronts as emanating from two spatially separated sources;

an interferometry module receiving said orthogonally polarized wavefronts, said interferometry module having a test object and a reference, a beam splitter and a collimator, said beamsplitter and said collimator defining a substantially common path for said orthogonally polarized wavefronts, wherein orthogonally polarized reference wavefronts and orthogonally polarized test wavefronts exit the interferometry module;

means for overlapping one of said orthogonally polarized reference wavefront with one of said orthogonally polarized test wavefronts;

a simultaneous phase shifting module receiving said overlapping one reference wavefront and said one test wavefront from said interferometry module for generating at least two phase-shifted interferograms substantially simultaneously.

34. An interferometric system, comprising:

a source module generating a beam of polarized light;

an interferometry module receiving said beam from said source module, having a reference object, a test object, and a quarter waveplate, wherein the reference object is configured to generate a reference beam arising from a reflection off the reference object and the test object is configured to generate a test beam arising from a reflection off the test object, further wherein the quarter waveplate is positioned between the reference object and the test object to provide said reference beams and said test beams with mutually orthogonal states of polarization; and

a simultaneous phase shifting module receiving said reference and test beams with mutually orthogonal states of polarization for generating at least two phase-shifted interferograms substantially simultaneously therefrom.